THE NECESSARY AND SUFFICIENT CLOSURE PROCESS

Frequently Asked Questions

The following questions have been raised during training sessions and applications of the "Closure Process for Necessary and Sufficient Sets of Standards. They address issues about the functioning of the Process and about the product of the Process, the Work Smart Standards set. The answers are based on the experience of Process practitioners as collected by the Department Standards Committee.

Q1 Does the N&S Closure Process put aside Department responsibilities for safety standards to the contractor?

A1 No, the N&S Closure Process does not put aside the Department's responsibilities for safety standards. Rather, it emphasizes thorough understanding of the work and the hazards as conditions for identifying and approving the controlling safety standards. The N&S Process requires that both DOE and the contractors be fully engaged at the management, worker and technical levels throughout the Process. Both DOE and the contractors must approve the set of standards and agree that the set when properly implemented will provide reasonable assurance of protection to the public, the workers and the environment. DOE and contractor personnel who have successfully completed the N&S Process report that they have gained an improved shared understanding of the work, the hazards and why the standards selected are appropriate to provide adequate safety. Several sites have expanded their standards base as a result of the N&S Process. Sites now "own" the WSS set, whereas before sites often viewed standards as forced upon them by DOE.

The N&S Closure Process supports the implementation of Department of Energy Acquisition Regulation (DEAR) clause concerning integration of environment, safety, and health into work planning and execution (48 CFR 970.5204-78), and is a Department-approved tailoring process for inclusion in the DEAR-required contractor Safety Management System. The Department's N&S Closure Process is described with requirements for its application in DOE M 450.3-1. The N&S Closure Process relies on a thorough understanding of the work to be performed and of the hazards associated with that work and on knowledge of appropriate controls to identify a set of standards (The Work Smart Standards set) that when implemented will provide reasonable assurance of adequate protection of the workers, public and environment. The requirements and process for approval of the Work Smart Standards set are within DOE M 450.3.1.

Q2 How do we know that the Work Smart Standards set will provide adequate protection?

A2 Each element of the N&S Closure Process is designed to establish confidence in the governing set of standards resulting from proper Process

application. Key features of the Process are teams of knowledgeable people well grounded in the work and hazards, technical justification, peer review and stakeholder involvement. All of these are hallmarks of successful standards and regulatory processes.

The N&S Closure Process emphasizes:
Team-enhanced collective competence, knowledge, and experience of qualified practitioners
Thorough understanding of the work and associated hazards and of experience-supported controls for those hazards.
A documented justification, available for review of the correctness of the WSS set for the work and the hazards.
The identification, review, and approval practices of the N&S Closure Process.

These key features of the Process, joint DOE and Contractor approval of the standards set, continuing feedback and improvement with rigorous change control provide confidence in the protection provided by a properly implemented standards set.

Q3 How can we be assured of adequate safety if some alternative standards to the DOE ES&H Orders are identified for the WSS set?

A3 Proper application of the N&S Closure Process establishes a WSS set that provides reasonable assurance of adequate protection whether or not particular standards, including DOE Orders, are identified within the WSS set. It is the collective control of the WSS set, developed according to the N&S Closure Process, that provides adequate protection when appropriately implemented through Integrated Safety Management.

The DOE ES&H Orders represent an effective way of achieving safety for certain work done by the Department, particularly for work which is essentially unique to the Department. The DOE Order system has provided a consistent approach across the Department for control of the hazards considered in the Order development. The Orders are by necessity somewhat broad in scope. The focus of the N&S Closure Process is on understanding the particular work to be performed, hazards associated with that work and identification of a proper experienced-based set of standards for control of those hazards.

Fidelity to the N&S Closure Process leads to identification of the proper WSS set. The Process does not specify sources of standards. The principal issue is adequate protection not the source(s) of the standards selected.

Consideration of the DOE Orders developed for particular hazards within the scope of a specific N&S Closure Process application is appropriate where selection of a particular DOE Order may be advantageous because of:
Familiarity and experience of the work force with the DOE Orders
Existing implementation processes for the Orders
Ease of explaining to DOE and order-experienced personnel the coverage of

the WSS set
Linking controls of the WSS set to the controls exercised through the Orders.

In some cases, DOE Orders may not be appropriate for specific work and hazards; or, other standards, such as commercial standards, may more closely correspond to the work and hazards environment. Similarly, the work force may be more familiar with working to consensus standards.

In ensuring that the appropriate safety topics are addressed in a WSS set, it may be beneficial to provide a mapping of the coverage of the safety topics by a WSS set and by the DOE Safety Orders.

Q4 Are there any ES&H Orders that must be included in the WSS set identified by the Closure Process?

A4 As the responsible federal agency, the Department of Energy has the authority, unless prohibited by law, to require of its contractors the inclusion of specific conditions (requirements) within DOE contracts. In accordance with normal contracting practices, such inclusion is subject to negotiation between the DOE and the contractor. The contents of the set are governed by the actual work and hazards in the contract statement of work and the hazards associated with that actual work. The elements of a WSS set are mandatory if:
They include applicable Federal, state, and local laws and regulations, or
The WSS set, or portions of it, become contract requirements by inclusion within a DOE contract.

By agreeing to the application of the N&S Closure Process, the DOE has strongly indicated that it intends to accept the WSS set resulting from the faithful application of the N&S Closure Process.

Q5 Is the N&S approach the same as the “graded approach?”

A5 The “tailored approach” of the N&S Closure Process is not the same as the “graded approach” even though the two approaches may arrive at a similar objective of applying requirements in a manner that recognizes the significance of the hazard being controlled. Tailoring is work and hazards based; grading is primarily requirements based.

The Tailored Approach is based on an understanding of the specific work, the work environment, and the hazards associated with the specific work and on knowledge of experience-supported standards that control the specific hazards. The N&S Closure Process identifies a tailored set of standards from applicable standards sources. When implemented, the standards provide for those hazards reasonable assurance of adequate protection of workers, the public and the environment. The N&S Closure Process “tailoring” is fundamentally work and hazards based.

The “graded approach” means grading selection of standards or grading

application of standards. In the graded approach the standards are DOE Orders or specific requirements within DOE Orders. The application of "grading" varies the degree, intensity or rigor of application of the standards across a range of defined work depending on the relative significance of work hazards to be controlled. "Grading" is fundamentally requirements based. A definition appears in the SAR Order (DOE O 5480.23.)

Q6 What happens if oversight personnel do not agree that the set provides adequate protection or was developed without the required fidelity to Process requirements?

A6 If oversight personnel challenge the adequacy of the WSS set or challenge the bases for its approval, the challenge must be resolved.

Resolution is provided by:

- Under Chapter 1 of the N&S Closure Process any challenge to the WSS set is to be submitted to the Agreement Parties where the challenge is decided on its merits.
- If the Agreement Parties decide the challenge has merit, action will be taken to correct the deficiency. This may include re-performing the N&S Process for the area(s) of concern.
- If the Agreement Parties decide the challenge does not have merit, the basis for this decision is provided to the challenging party. If the challenging party does not agree with the basis for the decision, as necessary, the challenge is argued before the appropriate level of line management.

Once a standards set has been established and implemented any challenges to the adequacy of the set are typically addressed through change control mechanisms.

Q7 Does agreement on the set of standards require a change of the contract?

A7 Whether the standards set is included and specified as contract requirements depends on the purpose of the standards set.

- If the standards set is intended to be used to identify contractual requirements, the set must be incorporated into the contract. Information on the use of standards sets for this purpose is described in the ISM DEAR clause.
- If, under existing contract provisions on safety standards and requirements, the N&S Closure Process is used to identify standards to implement existing contractual requirements, no contract recognition of these implementing standards is necessary.

Q8 How do we know that the contractors won't choose a minimal set of standards?

A8 Application of the N&S Closure Process does not allow a contractor "to chose" the WSS set. No single party to the N&S Closure Process can control

it to the degree that a set unacceptable to the other parties.

The N&S Closure Process is a participative process which focuses on understanding the particular work to be accomplished and the hazards associated with that work, and subsequent identification of standards through the collective qualification of teams. The participative, iterative process among qualified teams leads to agreement on the appropriate – not minimal – set of standards that when implemented, provides reasonable assurance of adequate protection. Also, the N&S Closure Process calls for appropriate confirmation and specific approval of the application of the Process as well as the set of standards. Documentation, subject to review, that justifies the standards set is a strong additional incentive to identify the controlling standards with care.

A principal guard against minimal standards is the focus on understanding the work and its hazards preliminary to identifying controlling standards and justifying, on the record, that the standards are adequate. The N&S Closure Process closely joins the understanding of the work and its hazards with knowledge of appropriate controls.

Q9 Will the documentation for WSS sets be standardized in the future?

A9 The documentation of a WSS set is inherently tailored to the Work it addresses and the local contract in which those standards are to be implemented. From the present experience of more than four years there is little evidence that documentation expectations can be standardized beyond the basic requirements stated in Process Element 3, “Defining and Agreeing to Protocols and Documentation Requirements.” The Convened Group defines the specific requirements for this documentation and may include additional documentation requirements to suit the specific application of the Process.

Q10 How will the Department know what’s going on?

A10 As with all aspects of its commitment to ISM, the Department is a party to the Process in all applications requiring Department agreement on the set of standards. Specific Department elements will be Agreement Parties and Resource Authorities, and other DOE headquarters and field elements may participate as appropriate.

Q11 How does EH get involved in the Process?

A11 EH elements have participated in the Process as Convened Group Members, Technical Operational Experts, or as Confirmation Team members depending on the situation. However, as a matter of EH policy, EH independent oversight elements do not participate. EH oversight may assess whether specific applications of the Process have been conducted in accordance with the Manual (M 450.3), and whether the agreed upon requirements are adequately implemented.

Q12 How do we assure consistency in the Work Smart Standards sets of standards across the complex?

A12 The Department's Integrated Safety Management goal is to achieve consistent and excellent protection of workers, the public, and the environment. Because the work, work definitions, expected hazards, and conditions of work vary widely across the complex, the standards necessary to achieve this goal must also vary from place to place. Consistent adequacy of tailored protection controls demands consistent, excellent management of the Department's work, dedication of its employees, and a willingness to accept the responsibility that this entails.

It is recognized that when applying the N&S Closure Process that fidelity to the requirements and the underlying logic given in DOE M 450.3-1 are important to the integrity and thus the acceptance of the Process as a legitimate means of standards identification. The Department Standards Committee, on behalf of Department line management, oversees Process applications and promotes a high standard of Process fidelity as the most important Process contribution to consistency in adequate protection.

Q13 Will the sets of standards be similar for similar facilities?

A13 Similar facilities are likely to identify similar, but not identical, sets of standards. Differences in physical plant or process, organizational structure, management policies, work force capabilities, and political factors are all potential sources of differences in sets of standards. Similarity is often a more meaningful basis in the comparison of safety performance outcomes.

Q14 If the Work Smart Standards set incorporates external standards, who interprets those requirements?

A14 Existing contracts (and Orders) contain or reference external standards, such as laws, regulations and consensus standards, that may require interpretation. The incorporation of external standards into WSS sets does not require a change from the existing policies or practices regarding interpretation. In general, the chain of authority for the interpretation of standards used by contractors is: contractor line management, Department line management, the sources of the standard (regulatory or consensus organization), and the courts. Under the practices established by the ISM DEAR clause, the contract, that includes explicit DOE approved provisions for safety management, becomes both the operational and regulatory basis for interpretation of the integrated set of requirements for safe work. Thus, the contract agreement processes established by the DEAR clause address all the various interpretive situations that might be encountered during the life of the contract. Of course, where requirements are grounded in law or regulation the contract defers its interpretive authority to the source agency.

Q15 Is there a preference for applying the N&S Closure Process at the site level or the activity level?

A15 Application of the Process at the site level and the activity level are not mutually exclusive. The Process can be applied at any level where the Department and the contractor must agree on the standards to be applied. This clearly includes the contract requirements, and may include any site level and activity level work controls that require Department approval prior to the authorization of work

Q16 Who is going to make sure that the standards are used appropriately?

A16 The contractor must plan work in keeping with the DOE-approved ISM system to meet all applicable contractual requirements and subordinate commitments. Department line management will review the contractor's ISM plan and selected work plans and the contractor's implementation of those plans. Under ISM principles the Department depends on aggressive self-assessment by the contractor in combination with its own management reviews and independent oversight assessments. Performance incentives encourage effective self-assessment and self-improvement but if these are unsuccessful, the Department will expand its own line management and independent oversight.

Q17 What has to be in the authorization agreement called for in the ISM DEAR clause?

A17 An authorization agreement establishes the conditions for the authorization of work. The details of a specific agreement are locally tailored to factors such as agency risk exposure, threat to mission completion or safety performance trends that might impede that standards-based work plan. It should define limiting conditions of normal operations, approval conditions that may not be changed without prior Department approval, and conditions that may be acceptably changed by the contractor with only subsequent notice to the Department.

Q18 How do DOE and the contractor come to agreement called for by the ISM DEAR clause?

A18 There are many ways for the Department and the contractor to come to agreement. Each time a contract or a work authorization is signed, an agreement has been reached. The N&S Closure Process is used by the Department and contractor line management as a mechanism to focus on the work and hazards and on planning as the basis for achieving adequate protection. The agreements called for in the ISM DEAR clause are considered to be anchored in the Annual Program and Budget guidance process and therefore include both relatively fixed (e.g., infrastructure standards) and dynamic components.

Q19 How long will it take to develop a set of standards?

A19 Clearly, there is not a definitive answer to this question, because applications of the Process will vary widely in scope and complexity. The level of effort required for contract requirements will, equally clearly, be greater than that required to insert boilerplate, one-site-fits-all requirements. However, this added effort in defining necessary and sufficient sets of contract requirements and a focus on work planning involving necessary and sufficient work controls will save the enormous effort that used to be devoted to stove-piped implementation plans and assessments of compliance with inappropriate requirements which added little to the level of protection.

Q20 How can the Confirmation team approach its responsibility to determine whether the proposed Work Smart Standards set is "feasible"?

A20 The confirmation test that the Work Smart Standards set is "feasible" is a process safeguard against adopting standards that those responsible for implementation *might* not reasonably be expected to achieve. Feasibility focus is not on the ability of the standards to guide performance (i.e. "adequacy"), but rather on a potential future failure to achieve standards-based and safe work because of insufficient resources for application of the standards. The N&S Closure Process requires the Identification and Confirmation Teams to assess both the adequacy and feasibility of the standards set. The agreed upon definition of the work and the institutional implementing assumptions about how that work will be carried out are first developed as a description of initial conditions by the Convened Group during Process Element 1: Defining the Work and Hazards. The requirements for describing both work objectives and a relationship of those work objectives to some organized system for the delivery of that work are equally important to the ultimate utility of the WSS set. By starting with the Convened Group's core of guidance, the Identification Team is reasonably expected to further refine the definition of work, hazards and controls in a way that integrates implementability and technical sufficiency to provide for adequate protection.

In the N&S Closure Process Element 4: Identifying the Necessary and Sufficient Set of Standards, relevant knowledge of the work and the available mechanisms of performance are brought to bear to achieve an adequate and feasible WSS set. The requirement that the Identification Team confirm and document implementing assumptions serves to address issues of feasibility in going from the pre-WSS situation of the organization to a post-Process state of WSS conformance. As stated in Chapter III of the Manual, "Planning and performing work in accordance with the approved set of standards requires an adequate system for managing the work." Properly developed WSS sets will document assumptions about the specific "system for managing the work" into which the care and implementation of the new standards set will be entrusted. Such documentation serves primarily to inform those within that "system" what considerations the Process applications had in mind when settling to closure on a particular WSS set.

During Process Element 5: Confirming the Necessary and Sufficient Set of Standards, the Confirmation Team examines how well the Convened Group and the Identification Team in working to closure on the proposed WSS set have anticipated and addressed the conditions in the receiving (i.e. implementing) organization. This is done to provide the Approval Parties assurance that the existing "system for managing the work" can "get there" (to WSS conformance) "from here" (the prevailing condition of the organization). It is critical to recognize that, as with the "adequacy" of protection test, the Confirmation Team is not expected to develop a fully independent assessment of "feasibility." Rather the evidence of feasibility should come primarily from the documented work of the Convened Group and the Identification Team to assure that the WSS set is understandable both in terms of protection and its context for implementation. This point simply

restates the recognition that a WSS set must address both technical and management considerations and takes it one step further by requiring that the managerial aspects of the proposed set be grounded in the specific local conditions of an existing management system.

As with adequacy confirmation, there can be no explicit limits upon the ability of the Confirmation Team to assess the credibility of the implementing assumptions and other elements of the set that address feasibility for implementation. The Convened Group and Identification Team will necessarily apply some presumed effectiveness of the receiving management system's ability to take the WSS set and then develop the needed system or upgrade the existing management system to the new set of standards. To the extent that documentation of the Process application makes clear what was assumed about the management system; what level of capability was assigned to that system; and what evidence upon which the expectation of competence was established, the Confirmation Team might have a relatively simple task of *confirming* feasibility. Conversely, to the extent that the work is radically different, the organization for implementation non-existent or immature in its capabilities, or that some proposed standards are more challenging to meet than prior performance levels achieved by the management system, the Confirmation Team may need to dig deeply into the credibility of the implementation assumptions made by the Convened Group and the Identification Team.

In order to prevent the Confirmation Team from exceeding the process-intended scope of the WSS set feasibility determination, confirmation protocols might stress that the burden of proof for feasibility is ultimately and necessarily on the earlier steps in the Process. There is a recognition in the Process that the Confirmation Team is dependent to some significant degree upon the knowledge, relevant experience and collective work of both the Convened Group and the Identification Team. By selecting a Confirmation Team membership with equal or stronger credentials, there is an expectation that such a group can draw upon both the tangible and intangible parts of its own collective experience to more or less rapidly determine if the proposed WSS set is feasible. If the Confirmation Team is inclined to conclude that it needs to do a separate assessment of implementing organization capability, this inclination is best viewed as a failure on the part of the Convened Group and the Identification Team to make clear how they concluded the set was feasible and the set should be returned to those groups for further work. In this sense the Confirmation Team's role is analogous to that of judge and jury in a trial, it is the prosecutor's job to develop both the facts (i.e. standards for adequate protection), and the case for the conclusions it suggest be drawn from the facts (i.e. that the standards can reasonably be implemented.)

Q21 What is the significance of the finding that the N&S Closure Process has been correctly implemented; that is applied with "fidelity"? How can fidelity confirmation to be approached?

A21 Process fidelity verification relates to the confidence that others who were not

directly involved in standards identification, ought to have in the results of the Process. The basis for depending upon fidelity as a measure of Process effectiveness is the demonstration that the Process requirements draw plentifully upon the recognized DOE Integrated Safety Management concepts, plus the fact that application of such concepts has demonstrated its value in numerous other high technology, high hazard industries.

The N&S Process Elements follow the logic of the Core Functions of ISM. Through frequent iteration among the various intermediate closure points, the Process elements progressively develop an agreed upon and integrated expression of work, hazards, and controls that always starts from and returns to the need to Do Work Safely. The structure for reaching agreement is robust, with multiple, explicit, and semi-independent levels of definition (Process Leadership and Convened Group), analysis (Teams) and verification (Confirmation Team and Approval Parties). The ISM Guiding Principles of clear roles and responsibilities, demonstrated team competence, tailoring, and balancing of priorities are all explicitly incorporated in Process Manual requirements. Process documentation is required for both WSS set components and for records of decision-making that support the justification of WSS set as adequate and feasible; thus the N&S Closure Process ensures that readiness for operations proposed to be authorized, on the basis of the identified standards and implementing assumptions, can in fact be reached.

Throughout the Process application, Line Management bears the lead responsibility for the WSS set, its development, and its justification of adequacy. With elaborate process logic detail, and frequent reference to performance attributes that must be addressed in order to make the WSS set both adequate and feasible, the N&S Closure Process manual requirements self-define the elements of demonstrating fidelity to the Process. However, precisely because the N&S Closure Process is built on ISM principles, “fidelity” can rarely be deduced from a simple verification checklist. It is a matter of practical experience that Convened Group understanding (or “profound knowledge” in the words of W. Edwards Deming) about the kind of safety management system needed to embody the ISM principles is a predictor for achieving evident demonstration of Process fidelity. Manual requirements provide many effective lines of inquiry for Confirmation Teams and Approval Parties to test this understanding.

Q22 What lessons were learned at LLNL from following the N&S Process?

A22 Lessons learned from the LLNL N&S Process application are summarized below, and are also reflected in the body of the N&S Handbook.

The N&S Process should include all ES&H aspects of the performance and management of work. Work activities are performed within the total programmatic and safety environment of the institution. Selection of safety standards is best done based on the hazards associated with the work and

an understanding of the management philosophy and processes. Also, standards for the management of safe work are often critical first line elements for creating a safe work environment and should be considered in selecting a complete WSS set.

Since the N&S Process is an integral part of ISM, the activities should be initiated at the same time. ISM and the N&S Process have a synergistic relationship. Standards identification is a key step in the ISM work functions. Similarly, having a strong foundation in the principles and functions of ISM will allow the N&S Closure Process to proceed more efficiently and provide a context for the selection of both technical and management standards.

Complete documentation supporting justification of adequacy of proposed standards should be provided to the Confirmation Team. The N&S Process identifies various types of documentation and the responsible party as a normal part of the Process. A complete and integrated set of documents describing and documenting the Process is necessary before confirmation to permit the Confirmation Team to understand and evaluate the Process. This information should be provided to the Confirmation Team 3-5 weeks before their site visit to allow adequate time for review.

Confirmation Team members should make a separate visit to tour facilities and become familiar with the site. The Confirmation Team needs to have adequate information, understanding and first hand experience of typical work environments and their safety systems. A separate visit allows sufficient dedicated time for site familiarization and a helpful background for review of documentation prior to the confirmation visit.

The entire safety management system should be described to the Confirmation Team so they can assess the feasibility of the WSS Set. The Confirmation Team needs to clearly understand the nature of the entire safety management system. This is needed to build confidence in the current safety system and proposed ISM system before they can take on the task of assessing the feasibility of the WSS Set.

A list of the complete set of proposed standards should be given to the Confirmation Team. The Confirmation Team should be given the full set of ES&H standards so they can evaluate both the completeness and adequacy of the final product.

Interested Parties need to be identified early in the Process (e.g., DOE/HQ, DNFSB) and kept up to date. The N&S Process can result in significant changes to the way LLNL performs work safely. Interested Parties must be identified early in the Process and kept informed throughout the Process to ensure that they understand the potential changes, their ramifications and to be better prepared to continue their relationship with LLNL.

Top management engagement throughout the entire Process is a key

success factor. Laboratory and DOE Oakland Operations Office top management must be continually engaged to ensure the success of the Process. Their continued involvement by attending Convened Group and Standards Identification Team meetings clearly demonstrated to all the importance of the Process to safety at LLNL. Management is also then in a better position to provide the necessary resources and eliminate barriers to progress.

The N&S Process requires a transition from an expert based system to a standards based system. LLNL works to manuals that have been maintained by safety subject matter experts based on their extensive experience at LLNL and knowledge of related safety areas. With the implementation of the WSS set of standards, the subject matter experts will need to improve their knowledge of the current standards and be prepared to propose modifications of the WSS set based on improvements of existing standards.

The N&S Process requires a commitment to formality and rigor for an organization such as LLNL. The management of a N&S Process where a wide variety of work and hazards, including nuclear, are involved requires a commitment to extensive review and complete documentation following the requirements outlined in DOE Manual 450.3.1.

The N&S Process is a manpower intensive activity which can create operational resource conflicts unless managed properly. Assigned program staff, Assurance Managers, ES&H Subject matter experts and line managers are major contributors to the N&S Process. A careful assessment of day-to-day ES&H Program needs has to be balanced with N&S Process support. ISMS also adds another demand on their time.

There are different kinds of workers who all need to be included in the N&S Process. The N&S Process should include all types of workers in the identification of work and characterization of the hazards. Upper, mid and first level supervisors as well as hands on technicians and crafts workers should be included in the N&S Process in order to benefit from their various perspectives and experience.

The selection of standards to manage work safely is based on the work and the broad experience of its managers. Safety standards can be selected based on the work and its associated hazards. The selection of standards to manage work safely is not only based on a knowledge of the work, but also the broad experience of managers who understand the institutional philosophies and complexities of managing work safely at LLNL. In fact, it was our experience that in some management areas broad managerial experience was more important than detailed knowledge of the work.

Local Standards were developed to build on, add to and quantify information in existing DOE Orders and consensus standards. Over the

years, research and development activities at LLNL on the many and complex national needs has resulted in LLNL performing unique work and developing special expertise in dealing with certain hazards. In moving from an experience based to a standards based ES&H system, LLNL needed to develop and codify local standards controlling the unique work and hazards to supplement the existing body of consensus and DOE standards. Also, in several more common areas, e.g., ergonomics and the use of HEPA filters, we found that adequate national standards were not available.

As a part of the N&S Process OAK and LLNL Staff with similar technical qualifications developed and demonstrated a common understanding of the work and associated hazards. The process of selecting the standards brought together DOE OAK and LLNL staff to understand the work, its hazards and the available standards. This common understanding was clearly demonstrated in several internal reviews held prior to confirmation where the reviewers could not readily determine whether the presenters were from LLNL or DOE/OAK.

The N&S Process leads to a better understanding of requirements and expectations by the various participants. The N&S Closure Process required participation by the workers, as well as DOE and LLNL program managers and ES&H professionals and required them to focus on the work and the hazards. This common focus, with its exchange of information and experience regarding the work and the standards to provide adequate safety resulted in a shared understanding of requirements and expectations by all involved.

Readiness for Confirmation is multifaceted:

(a) Required N&S Process elements and the appropriate documentation should be reviewed. The Confirmation Team expects to understand the context, including the implementation of the N&S Closure Process, in which the standards were selected. Careful documentation of how the Process was implemented is critical to meeting this expectation.

(b) The Convened Group and the Standards Identification Team need to have evaluated the feasibility of the set and be prepared to articulate this to the Confirmation Team. The Confirmation Team is asked to confirm the adequacy and feasibility of the set of standards. Understanding the assumptions and agreements made in determining the adequacy of a standard together with an understanding of the LLNL management system constitute the minimum elements necessary for the Confirmation Team to assess feasibility of the WSS set. Although not required by the N&S Closure Process, internal reviews in preparation for the confirmation process were very useful.

Confirmation Team Co-Chairs should visit the site several weeks before confirmation, review the schedule and documentation and develop a

strategy to follow during the Confirmation Team visit. For a large N&S Process the Confirmation Team Co-Chairs should visit the site and become familiar with the documentation, review the schedule for presentations and tours and meet with key staff. These interactions will permit the Co-Chairs to develop an effective and efficient strategy for the full team s visit.

The Change Control Process for the WSS set and ISM implementation should be integrated and an organization identified to administratively manage the set. The WSS set is an integral part of the ISM process and any changes to the set need to be implemented in a timely manner. By having a combined Change Control Board, the selection and revision of standards will be fully integrated with their implementation to assure the maintenance of an adequate safety system at LLNL.